5   propagated to a corresponding global register in the other of said one or more register files,

6   and wherein when a value is written to one of said Q-number of said registers which is a

7   private register within one of said one or more register files, said value is not propagated to a

8   corresponding register in the other of said one or more register files.

1   27.   The computer processing architecture as recited in claim 26, wherein

2   Q=64, and a 64-bit special register stores bits indicating whether a register in a register file is

3   a private register or a global register, each bit in the 64-bit special register corresponding to

4   one of said registers in said register file.

1   28.   The computer processing architecture as recited in claim 26, wherein

2   said program counter register is a global register.

1   29.   In a processing core comprising a processing pipeline having N-

2   number of processing paths, each of said processing paths for processing instructions on M-

3   bit data words, and one or more register files having Q-number of registers, said Q-number of

4   registers being M-bits wide, a method for jumping from one location in a program to another

5   location in a program, comprising the steps of:

6   storing a current program counter value in a program counter register, which is

7   one of said Q-number of register in at least one of said one or more register files; and

8   adding a value to said current program counter value stored in said program

9   counter register using a standard add operation.

1   30.   In a processing core comprising a processing pipeline having N-

2   number of processing paths, each of said processing paths for processing instructions on M-

3   bit data words, and one or more register files having Q-number of registers, said Q-number of

4   registers being M-bits wide, a method for calculating a memory address, comprising the steps

5   of:

6   storing a current program counter value in a program counter register which is

7   one of said Q-number of register in at least one of said one or more register files; and

8   adding a value to said current program counter value stored in said program

9   counter register using a standard add operation.